Claims

1. A dispatching method for polling device data, comprising the steps of:

1) sorting managed devices according to their types, sorting various types of data of each device so as to form different modules, and assigning a priority attribute and a polling period attribute to each module;

2) dividing the managed devices into two sets: one set consisting of devices to be polled and the other set consisting of devices whose connection states need to be detected; and

3) polling each module in the set consisting of devices to be polled according to its priority and polling period periodically.

2. The method of Claim 1, step 3) further comprising:

forming a current polling task queue according to said periodical polling, and dispatching the polling through the current polling task queue;

wherein the data items for describing the current polling task queue include task ID, occupied flag, module ID, device ID, activation time and priority; said activation time is the current time in the case of inserting a task and will be updated when a report about executing situation of the task sent from daemons has been received; said occupied flag is set free after a corresponding message showing the polling task has been completed is received or the polling task is overtimed.

3. The method of Claim 2, further comprising:

setting a maximum number of polling tasks;

wherein the current polling task queue is generated according to said maximum number of polling tasks.

4. The method of Claim 2, further comprising:

setting a polling initiating time for system;

wherein the periodical polling is implemented based on said polling initiating time plus a polling interval.

5. The method of Claim 4, wherein the polling period attribute of a module is a multiple of a polling interval, equaling to a multiple of the interval between the periodical system polling in step 3).

6. The method of Claim 5, step 1) further comprising the step of generating a data structure for describing device type after sorting managed devices according to their types and sorting various types of data of each device so as to form different modules, wherein the data items for describing the data structure include device type, module ID, priority, polling interval multiple and corresponding daemon ID.

7. The method of Claim 6, wherein said set of devices to be polled is a current operation device set and the data items for describing this set include device ID, module ID, device type and the last polling time;

said set of devices whose connection states need to be detected is a current display device set and the data items for describing this set include device ID and connection state.

8. The method of Claim 7, wherein the step of dispatching the polling through the current polling task queue comprises:

a. setting said polling initiating time at the summation of the current time plus a polling interval;

b. determining whether there is a free task in the current polling task queue based on the occupied flag; if so, continuing the process, otherwise returning to step b;

c. selecting the next device module to be polled from the current operation device set; and

d. determining whether the information obtained in step c is Null or not; if not, assigning a task ID to the selected device module and inserting the task ID into the current polling task queue, and simultaneously sending a message for initiating the polling of said device module to the corresponding daemon process, then returning to step b; if so, determining whether all tasks in the current polling task queue are in free state, if all tasks are in free state, ending the process, otherwise returning to step b.

9. The method of Claim 8, step c further comprising:

c1. selecting the next device module;

c2. determining whether [(the current time − the last polling time)/polling interval multiple of the module] is greater than or equal to the system polling interval, if so, continuing the process, otherwise going to step c4; and

c3. determining whether there is a module with higher priority of the same device being polled in the current polling task queue; if so, returning to step c1, otherwise returning the device module information and ending step c; or

11

c4. determining whether said polling interval multiple is greater than one; if so, returning to step c1, otherwise returning a message of NULL and ending step c.

10. The method of Claim 1, further comprising:

4) selecting sequentially a device from the set consisting of devices whose connection states need to be detected and making ping operation for the device; wherein the success of ping operation shows said device is connected to the network management system and failure of ping operation shows said device is not connected to the network management system; if the connection state of said device is changed, notifying other daemons and foregrounds about this condition.